REMARKS

Entry of this amendment and reconsideration of the claims in view of the following Remarks is respectfully requested. In the prosecution history, the Examiner has repeatedly acknowledged that the primary cited art does not disclose cell death by apoptosis, and the previously presented claims were not restricted to methods for inducing apoptosis. Applicants note that the claims are now restricted to methods for inducing apoptosis.

Applicants have amended claims 28, 32-34, 40, and 42. Applicants have amended the claims to include sequence identification numbers and to incorporate the limitation of inducing apoptosis into the body of the claim. Support can be found throughout the specification including at page 5, lines 9-17; page 9, lines 22-35; page 10, lines 11-23; and throughout the Examples at pages 38-43. Specifically, Example 3 at page 42, lines 1-26 demonstrates the apoptosis of SKOV3 ovarian cancer cells after binding by antibody 7C2. No new matter has been added by these amendments.

Please cancel claims 46-48, 58, 60, and 63-65 without prejudice or disclaimer. Applicants reserve the right to pursue the subject matter of these cancelled claims in a continuation application.

Applicants respectfully request reconsideration and withdrawal of the pending rejections under 35 U.S.C. § 102(b) and § 103(a).

Rejections under 35 U.S.C. § 102(b) and § 103(a)

The Examiner rejects claims 28-40 and 42-65 under 35 U.S.C. § 102(b) and § 103(a) for alleged anticipation and/or obviousness in view of Shepard et al. (*J. Clin. Immunol.*, 1991) or Lewis et al. (*Cancer Immunol. Immunother.*, 1993) either alone or in combination with Fendly et al. (*Cancer Res.*, 1990), Deshane et al. (*J. Invest. Med.*, 1995) and Senter et al. (U.S. Patent No. 4,975,278). The Examiner rejects claims 28-40 and 42-65 for reasons of record that date back to the Office Action of July 10, 2000. Applicants respectfully traverse these rejections. Applicant is combining the response to all rejections since all of the rejections are based on the aforementioned references and do not disclose antibody binding to the 7C2 epitope and inducing apoptosis.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Mashinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984); *See also*, MPEP §2131. To establish a *prima facie* case of obviousness, the prior art reference(s) must teach or suggest all the claim limitations. MPEP §2143; *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

Applicants respectfully assert that the cited art does not teach each and every claim element, specifically where antibody binding induces apoptosis. In fact, the Examiner has acknowledged this throughout the Office Action of July 10, 2002.

Shepard et al. do not teach antibody induction of apoptosis. In fact, the Examiner stated at pages 9-10 of the Office Action of July 10, 2000, that Shepard et al. do not disclose antibodies inducing apoptosis. In fact, Shepard et al. did not determine the properties of antibody 7C2. At page 120, second column, Shepard et al. state

> the properties that distinguish 7C2 from the other antibodies with regard to its ability to stimulate the proliferation of several of the tumor cell lines shown in Table III has not been determined.

Further, Table III at page 123 shows that antibody 7C2 stimulated cell proliferation in breast carcinoma cell lines MDA-MB-361, which overexpresses Her2. The data from Table III teach away from using antibody 7C2 or an antibody binding the same epitope to induce apoptosis. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). Applicants respectfully assert that Shepard et al. do not disclose antibody induction of apoptosis and teach away from the claimed subject matter.

The other cited art does not remedy this defect. The Examiner also stated at pages 9-10 of the Office Action of July 10, 2000, that Lewis et al. do not disclose antibody induction of apoptosis. Further, the Examiner characterized the Fendly et al. reference as disclosing the "production and characterization of the monoclonal anti-Her2 antibodies utilized by Shepard et al. and Lewis et al." (Office Action, July 10, 2007 at page 10). Fendly et al. do not characterize the antibody for inducing apoptosis. The Examiner also characterized the Senter et al. patent as disclosing "methods of chemotherapeutic agent delivery to tumor cells..." (Office Action, July 10, 2007 at page 10), which does not disclose antibody binding to an epitope to induce

apoptosis. None of these references disclose or suggest antibody binding to an epitope to induce apoptosis.

The Examiner further cites Deshane et al. in combination with Shepard et al. or Lewis et al.. The Examiner characterizes Deshane et al. as disclosing "intracellular antibody knockout of the ErbB2 oncoprotein" (Office Action, July 20, 1007 at page 10). More accurately, Deshane et al. describe their method as "a gene therapy treatment model." Deshane et al. do not teach the method as claimed using antibodies binding to the specific epitope as claimed.

For at least these reasons, the cited art does not disclose, teach, or suggest an antibody binding to the 7C2 epitope and inducing apoptosis of said cell.

Applicants respectfully assert that the Examiner has not established anticipation or a *prima facie* case of obviousness. In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(b) and § 103(a).

Summary

Applicants submit that the claims are in condition for allowance and notification to that effect is earnestly solicited. The Examiner is invited to contact Applicants' representative if prosecution may be assisted thereby.

Respectfully submitted,

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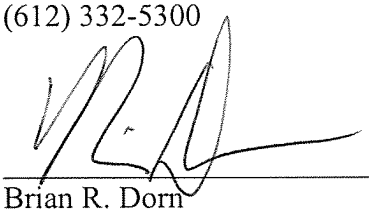

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